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EXAMINER

BLOUNT, STEVEN

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 08/27/2003

22

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/286,794

Applicant(s)

Baer et al

Examiner

Blount

Group Art Unit

2661

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☒ Responsive to communication(s) filed on 6/10/03

☒ This action is FINAL.

- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 49-67 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 49-67 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17:2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

Election/Restriction

A. In view of applicants amendment in paper number 21, the restriction requirement in paper number 20 is withdrawn. It is noted that the claim language in claim 57, line 4, has been changed from "disposed on" (paper number 19) to it's present form, "installed on".

1. The previous allowance of claims 49 - 56 and 62 - 67 in paper number 17 is hereby revoked.

Claim Rejections - 35 U.S.C. § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 49 - 67 are rejected under 35 U.S.C. 112 first paragraph for failing to contain a specification that contains a description of the invention that enables a person skilled in the art to make and use it.

Initially, it is noted that in support for the claims, applicant has relied upon *both* figures (and the embodiments as described in the specification) 1 and 4. On page 2 of the "Response to the office action dated June 6, 2001" (paper number 10), applicant states:

"The applicant is unsure how the examiner is lead to believe that the surface geometry is exclusively on the outside of the shaft because this language is clearly not present in claim 29 and a brief review of the drawings of the case reveals that the surface geometry could either be a

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compartment in the shaft as shown in FIGS. 4 - 6 or could be on the outside of the shaft as shown in FIGS. 1 - 3. The limitations recited in claim 29 are intended to cover at least the configurations shown in the drawings.”

The following are the basis for the 112 first paragraph rejection made above. After stating a reason for the rejection, the examiner has required that applicant *answer each question* that has been asked. Each question has been drawn to claim 49, but applies to claims 57 and 62 as well, since these claims are the same with respect to the important claim elements.

A. Claim 49 lacks support with respect to the different geometries claimed, no support being found in figure 4 and the written description. Where is there support for a) a motor shaft having a non-circular cross-section (lines 3 - 4), and b) where is there support for the shaft extension having a surface geometry different (second, line 7) from the motor shaft, in combination with the motor shaft having a non-circular cross-section ?

If applicant believes that the area inside member 113 where shaft 130 is presumably inserted is inherently of a non-circular geometry by virtue of the fact that shaft extension 130 fits into it, the examiner would respond that it is likely that it has a non-circular geometry, but not certain. All that is stated on page 9, lines 4+ is that “The end of the motor shaft 113 is machined to receive a shaft extension 130”. More importantly, as claim 49 now stands, what is claimed is “providing a motor shaft having a *first* end with a first surface geometry comprising a non-circular cross section...engaging a shaft extension comprising a first end having a *second* surface geometry...”. The surface of 113 is apparently circular, so how do we know that its interior is of

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a non-circular cross section ? Where is there evidence that it is of a different geometry than that of member 130 ? If anything, it is most likely the same as 130.

B. The examiner believes that the invention as shown in figure 4 would not work. On pages 8 - 9, it is stated that "A hex nut 125 is threaded onto the end of the motor shaft 113 to retain the washer 115, 120, the impeller 45, and the spacer 110 axially onto the shaft 113." If this is correct, then if it is threaded onto the shaft, how can it rotate (which is required if it is threaded *onto* the shaft) with the shaft, as well as apply pressure to retain the washer, impeller, and spacer in place at the same time ?

C. The examiner believes that the description of the invention, as shown in figures 1 and 2 upon which applicant relies for support, is inconsistent. With respect to figure 1, washers 40 and 50 are shown to be sandwiched together. However, in figure 2, the impeller 45 is shown to be sandwiched *between* members 40 and 50. Please explain.

D. Claim 49 lacks support with respect to the different geometries claimed, no support being found with respect to figures 1 and 2 and the written description. In figure 2, where is the first end with a first surface geometry comprising a non-circular cross-section? If it is the area at 35, it is difficult to base the entire surface geometry based on only two points, as this term of art implies the entire surface. More importantly, where is the shaft extension taught to be comprised of a surface geometry of a non-circular cross section, as required by line 8 of claim 49? Certainly not in figure 2, certainly not in figure 1, and it is certainly not taught in pages 6 - 7.

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E. Claim 49 lacks support in the written portion of the specification. If, as required by lines 7+ of claim 49, the shaft extension is engaged with the first surface geometry of the first end of the motor shaft (presumably at the locus between members 35 and member 55 in figure 1), then, as shown in figure 2, how can the motor shaft extension be installed "into abutment with the second washer 50" (page 6, lines 7+ of the written portion of the specification) ? Although it is theoretically possible that you could have the "bumps" 35 be so long that the keyed portions of the inner circles in members 40, 45, and 50 are all tangent with the bumps when installed and then member 55 is also installed so that it is also tangent with the bumps, this seems very unlikely and almost inconceivable, since there is not shown (or taught elsewhere) that there is a keyed portion in member 55 as well as the other members.

F. It appears that applicant is referring to the embodiment shown in figure 4 for support for the claims, as claim 52 states "wherein the first surface geometry defines a compartment within the motor shaft". If applicant is relying on figure 1, then please show where there is support for the compartment in figure 1.

Claim Rejections - 35 U.S.C. § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 49, 52, 57, and 60 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,254,349 to Haugen et al.

With regard to claim 49, note that, in figure 3, motor shaft 44 has impeller 14 installed “onto” it via shaft extension 42, proximate the first end. Note that although a “fan” impeller is not mentioned in the written portion of the specification of USPN 6,254,349, impellers are commonly known to be associated with fans, as is evidenced by the prior art figure 1. Note also that the use of the phrase “onto” is properly read to include “not touching” as shown in figures 1 and 4 of the application, as well as being a proper term of art. See also applicants cancellation of the phrase “mechanically coupled to” and replacement with “installed on” with respect to claim 49. With regard to claim 52, see the compartment 68 in figure 6. With regard to claim 57, see the rejection of claim 49 above and note that the apparatus limitations are also present in the method of assembly. With regard to claim 60, see the rejection of claim 52 above.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

7. Examiner Blount may be contacted at the Patent Office between the hours of 9:00 am to 5:30 P.M. Monday through Friday. His phone number is (703) 305-0319.


DOUGLAS OLMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

SB

8/21/03